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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/879,953 | 06/14/2001 | Noboru Endo | 520.36259CX1 | 6534 |
| 20457 | 7590 | 08/18/2005 | EXAMINER | |
| ANTONELLI, TERRY, STOUT & KRAUS, LLP 1300 NORTH SEVENTEENTH STREET SUITE 1800 ARLINGTON, VA 22209-3873 | | | HOM, SHICK C | |
| | | | ART UNIT | PAPER NUMBER |
| | | | 2666 | |

DATE MAILED: 08/18/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/879,953

Applicant(s)

ENDO ET AL.

Examiner

Shick C. Horn

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2666

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 April 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 13-17 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 13-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claim 4/29/05 have been considered but are moot in view of the new ground(s) of rejection.

Specification

2. The disclosure is objected to because of the following informalities: in page 2 lines 24 and 25, delete "interf ace" and "Identif ier" and insert ---interface--- and Identifier---, respectively. In page 3 line 24 delete "flow. under" and insert ---flow under---. Appropriate correction is required.

3. The lengthy specification has not been checked to the extent necessary to determine the presence of all possible minor errors. Applicant's cooperation is requested in correcting any errors of which applicant may become aware in the specification.

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

6. Claims 13-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Laubach et al. (6,028,860) in view of Han (6,009,097).

Regarding claims 13 and 15:

Laubach et al. disclose the method of switching IP (Internet Protocol) packets at a packet switching system, comprising the steps of: allocating a pair of an IP address and

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a port number in Transmission Control Protocol (TCP) or User Datagram Protocol (UDP) to a Virtual Channel Identifier (VCI) (see col. 12 lines 30-50 and col. 12 line 63 to col. 13 line 20 which recite the ATM frame having a destination address, a source address, port number; and IP datagram, respectively); and outputting IP packets whose headers have the IP address and the port number via a Virtual Connection (VC) corresponding to the VCI when the packet switching system receives the IP packets (see col. 10 lines 10-34 which recite the data flow using the virtual connection VC which is being based on the virtual circuit identifier VCI value).

Regarding claims 14 and 17:

Laubach et al. disclose wherein the IP address is a pair of a source IP address and a destination IP address (see col. 12 lines 30-50 which recite the ATM frame having a destination address, a source address, port number and col. 12 line 63 to col. 13 line 20 which recite the frame including the IP datagram).

Regarding claim 16:

Laubach et al. disclose wherein the information is a port number in Transmission Control Protocol (TCP) or User Datagram Protocol (UDP) (see col. 12 line 63 to col. 13 line 20 which recite the port number including the IP datagram in the frame).

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For claims 13-17, Laubach et al. disclose all the subject matter of the claimed invention with the exception of wherein if IP packet headers have a certain part identical with previously input IP packets, then the allocated VCI is the same as a VCI allocated to the previously input IP packets, and wherein if the certain part of the IP packet headers is different from the previously inputted IP packets, then the allocated VCI is an idle VCI as recited in claims 13 and 15.

Han from the same or similar fields of endeavor teach that it is known to provide wherein if IP packet headers have a certain part identical with previously input IP packets, then the allocated VCI is the same as a VCI allocated to the previously input IP packets, and wherein if the certain part of the IP packet headers is different from the previously inputted IP packets, then the allocated VCI is an idle VCI (see abstract which recite the use of cut-through paths which are switched virtual paths for flows toward the same destination and similar QOS to minimize overhead associated with setting up and tearing down the paths clearly anticipate that if IP packet headers have a certain part identical with previously input IP packets, then the allocated VCI is the same as a VCI allocated to the previously input IP packets and col. 3 lines 41-48 which recite the ATM router using TCP or UDP port of incoming packet to

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select QOS and the QOS and destination address of the packet being used in the routing table to select outgoing link whereby VCI are assigned and used to distinguish the flow clearly anticipate that if the certain part of the IP packet headers is different from the previously inputted IP packets, then the allocated VCI is an idle VCI) as recited in claims 13 and 15. Thus, it would have been obvious to the person having ordinary skill in the art at the time the invention was made to provide wherein if IP packet headers have a certain part identical with previously input IP packets, then the allocated VCI is the same as a VCI allocated to the previously input IP packets, and wherein if the certain part of the IP packet headers is different from the previously inputted IP packets, then the allocated VCI is an idle VCI as taught by Han in the communications method of Laubach et al. The limitations wherein if IP packet headers have a certain part identical with previously input IP packets, then the allocated VCI is the same as a VCI allocated to the previously input IP packets, and wherein if the certain part of the IP packet headers is different from the previously inputted IP packets, then the allocated VCI is an idle VCI can be implemented by providing the system for routing packet switched traffic using cut-through paths of Han to the switching method of Laubach et al. The

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motivation for providing limitations wherein if IP packet headers have a certain part identical with previously input IP packets, then the allocated VCI is the same as a VCI allocated to the previously input IP packets, and wherein if the certain part of the IP packet headers is different from the previously inputted IP packets, then the allocated VCI is an idle VCI as taught by Han in the communication method of Laubach et al. being that it provides more efficiency for the system since the system can minimize overhead associated with setting up and tearing down paths at the switch.

Conclusion

7. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

8. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened

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statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shick C. Hom whose telephone number is 571-272-3173. The examiner can normally be reached on Monday to Friday with alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Seema Rao can be reached on 571-272-3174. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

SH



DANG TON
PRIMARY EXAMINER